RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number:	10/068,870A
Source:	TFW16
Date Processed by STIC:	08/03/2005

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IFW16

RAW SEQUENCE LISTING DATE: 08/03/2005
PATENT APPLICATION: US/10/068,870A TIME: 15:02:11

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     11 <141> CURRENT FILING DATE: 2002-02-11
     13 <160> NUMBER OF SEQ ID NOS: 13
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128 129 131 132 134 136 142 144 146 158 150 162 164 166 168	<212> TYPE <213> ORGA <400> SEQU atgaaaaaaa ccagtttttg acagtatcaa acaacaggtg aaagattctt gctaatggaa gctattatag agtgaaaaaa aaatatgtgt ttcagtaaaa gtttctcaa gtaatattaa caaaaattga acagctatag gctgatgtta ggattagttg gattagttg gattagttg gataaattag acagaagtaa gttgtaacag	EDNA NISM: Clost ENCE: 4 gaaatttage cagcagette atactaaage cagttattt caactccaac atgaagatta atttaactta cagtagttgt ttgaagacaa ctgatagtta cttatagage ctctaaaate atgataagta agataagta agataagta agataagta cggeteett attegteagt caggaaaaac aattagaate	aatggctatg agatgtaata tagtgactta gaacaaagat tggagataaa tgtaaagaca taataatgct atctagtgat agacttagaa ctatcaagta tacaaattat tactagtaag ttctaatact agaatattac tagaatattac tagaatattac tagaagcagaa aaaatctgaa agtttatata aatgggatta	gcagctgtta tcactacaag gtaaaggata acaaaagttat acatttaaaaa aaactgttg gcgaaaaata aatgcactaa gttctttatc aatgaaggaa agtaatttaa acaactttag gtattagtag gtattagtag gtattagtag gtattagtag gctggtggag aaagttgaa	atggtacaaa ttttagcago ctttctatga cagaacaaac atttagatgo aaattaaagt gtgcaaaaga aaactataaa caaaaggaaa ctgcatatgg agactgcagt ctggtgatga gcgagaaatg cactattatt ttttagactt ttaatagtgt gattctcagg	tgataagtat acaaaactta tgcaaatgag tttaactaca aggagaatat agtagcagct tatagctgaa tgcctcagat gagattacaa taatacacca agaagagtta cagaatacaa agatcattca actagtagat aacttcaaaa aacttcaaaa taatacacta	120 180 240 300 360 420 480 540 600 660 720 780 840 900 960 1020 1080 1140
128 129 131 132 134 136 142 144 146 158 150 162 164 166 168	<212> TYPE <213> ORGA <400> SEQU atgaaaaaaa ccagtttttg acagtatcaa acaacaggtg aaagattctt gctaatggaa gctattatag agtgaaaaaa aaatatgtgt ttcagtaaaa gtttctcaa gtaatattaa caaaaattga acagctatag gctgatgtta ggattagttg gattagttg gattagttg gataaattag acagaagtaa gttgtaacag	EDNA NISM: Clost ENCE: 4 gaaatttage cagcagette atactaaage cagttattt caactccaac atgaagatta atttaactta cagtagttgt ttgaagacaa ctgatagtta cttatagage ctctaaaate atgataagta agataagta agataagta agataagta cggeteett attegteagt caggaaaaac aattagaate	aatggctatg agatgtaata tagtgactta gaacaaagat tggagataaa tgtaaagaca taataatgct atctagtgat agacttagaa ctatcaagta tacaaattat tactagtaag ttctaatact agaatattac tagaatattac tagaatattac tagaagcagaa aaaatctgaa agtttatata aatgggatta	gcagctgtta tcactacaag gtaaaggata acaaaagttat acatttaaaaa aaactgttg gcgaaaaata aatgcactaa gttctttatc aatgaaggaa agtaatttaa acaactttag gtattagtag gtattagtag gtattagtag gtattagtag gctggtggag aaagttgaa	atggtacaaa ttttagcago ctttctatga cagaacaaac atttagatgo aaattaaagt gtgcaaaaga aaactataaa caaaaggaaa ctgcatatgg agactgcagt ctggtgatga gcgagaaatg cactattatt ttttagactt ttaatagtgt gattctcagg	tgataagtat acaaaactta tgcaaatgag tttaactaca aggagaatat agtagcagct tatagctgaa tgcctcagat agagattacaa taatacacca agaagagtta cagaatacata agatcattca actagtagat aacttcaaaa aaaaacttca atctaaagaa	120 180 240 300 360 420 480 540 600 660 720 780 840 900 960 1020 1080

Input Set : A:\P67635USO-sequence listing .ST25.txt

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		ttacaagagt			-		1500
		atgctaatga					1560
		gtagtgatgc	_				1620
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		aatattctaa					1800
		tgaaagattt			33	•	1830
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196	<211> LENG'	TH: 2158					
197	<212> TYPE	: DNA					
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203	cctgtttttg	ctgcaactac	tggaacacaa	ggttatactg	tagttaaaaa	cgactggaaa	120
205	aaagcagtaa	aacaattaca	agatggacta	aaagataata	gtataggaaa	gataactgta	180
207	tcttttaatg	atggggttgt	gggtgaagta	gctcctaaaa	gtgctaataa	gaaagcggac	240
209	agagatgctg	cagctgagaa	gttatataat	cttgttaaca	ctcaattaga	taaattaggt	300
211	gatggagatt	atgttgattt	ttctgtagat	tataatttag	aaaacaaaat	aataactaat	360
213	caagcagatg	cagaagcaat	tgttacaaag	ttaaattcac	ttaatgagaa	aactcttatt	420
215	gatatagcaa	ctaaagatac	ttttggaatg	gttagtaaaa	cacaagatag	tgaaggtaaa	480
217	aatgttgctg	caacaaaggc	acttaaagtt	aaagatgttg	ctacatttgg	tttgaagtct	540
		aagatactgg					600
221	tatggtaaag	ttggagatag	tacggcaggt	attgcaataa	atcttcctag	tactggactt	660
223	gaatatgcag	gtaaaggaac	aacaattgat	tttaataaaa	ctttaaaagt	tgatgtaaca	720
225	ggtggttcaa	cacctagtgc	tgtagctgta	agtggttttg	taactaaaga	tgatactgat	780
227	ttagcaaaat	caggtactat	aaatgtaaga	gttataaatg	caaaagaaga	atcaattgat	840
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231	gatgaaattt	ctgaagcata	taaggcaata	gtagcattac	aaaatgatgg	tatagagtct	960
		agttagttaa			-		1020
		aatcagcaaa			-	-	1080
	_	ataaattaaa	_		-		1140
		caaatgttgt			_		1200
		aatattataa		_		-	1260
	_	tagttggatc				_	1320
245	tcagaaaaaa	cagctccatt	attattaact	tcaaaagata	aattagattc	atcagtaaaa	1380
		agagagttat					1440
		ctggtggagt					1500
		aagttactag					1560
		taggtcttga					1620
		gtatagctcc					1680
		atggaaaagc					1740
		atataatagg					1800
		ctggaaaaac					1860
		taaaagaaga					1920
265	gcaaaagatg	gttctactaa	agaagatcaa	ttagtagatg	ccttagcagc	agcaccaata	1980

Input Set : A:\P67635USO-sequence listing .ST25.txt

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267 gcaggtagat ttaaggagtc tccagctcca atcatactag ctactgatac tttatcttct
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269 gaccaaaatg tagctgtaag taaagcagtt cctaaagatg gtggaactaa cttagttcaa
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271 gtaggtaaag gtatagcttc ttcagttata aacaaaatga aagatttatt aqatatqq
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275 <211> LENGTH: 2271
276 <212> TYPE: DNA
277 <213> ORGANISM: Clostridium difficile
279 <400> SEQUENCE: 6
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282 cctgtatttg cagatgatac aaaagttgaa actggtgatc aaggatatac agtggtacaa
                                                                          120
284 agcaagtata agaaagctgt tgaacaatta caaaaaggaa tattagatgg aagtataaca
                                                                          180
286 gaaattaaag ttttctttga gggaacttta gcatctacta taaaagtagg ttctgagctt
                                                                          240
288 aatgcagcag atgcaagtaa attattgttt acacaagtag ataataaact agataattta
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290 ggtgatggag attatgtaga tttcttaata acttctccag gtcaagggga taaaataact
                                                                          360
292 acaaqtaaac ttgttqcatt qaaaqattta acaqqtqctt caqcaqatqc tataattqct
                                                                          420
294 ggaacatett cagcagatgg tgttgttaca aatactggag ctgctagtgg ttctactgag
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296 acaaattcag caggaacaaa acttgcaatg tcagctattt ttgacacagc atatacagat
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298 tcatctgaaa ctgcggttaa gattactata aaagcagata tgaatgatac taaatttggt
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300 aaagcaggtg agacaactta ttcaactggg cttacatttg aagatgggtc tacagaaaaa
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302 attgttaaat taggggacag tgatattata gatataacta aagctcttaa acttactgtt
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304 gttcctggaa gtaaagcaac tgttaagttt gctgaaaaaa caccaagtgc cagtgttcaa
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306 ccagtaataa caaagcttag aataataaat gctaaagaag aaacaataga tattgacgct
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310 aatactcttt ataaagtatt aaatggagat gaagcagata ctaatggatt aatagaagaa
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312 gttagtggaa aatatcaagt agttctttat ccagaaggaa aaagagttac aactaagagt
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314 gctgcaaagg cttcaattgc tgatgaaaat tcaccagtta aattaactct taagtcagat
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316 aagaagaaag acttaaaaga ttatgtggat gatttaagaa catataataa tggatattca
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318 aatgctatag aagtagcagg agaagataga atagaaactg caatagcatt aagtcaaaaa
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320 tattataact ctgatgatga aaatgctata tttagagatt cagttgataa tgtagtattg
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322 gttggaggaa atgcaatagt tgatggactt gtagcttctc ctttagcttc tgaaaagaaa
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324 gctcctttat tattaacttc aaaagataaa ttagattcaa gcgtaaaagc tgaaataaag
                                                                         1380
326 agagttatga atataaagag tacaacaggt ataaatactt caaagaaagt ttatttagct
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328 ggtggagtta attctatatc taaagaagta gaaaatgaat taaaagatat gggacttaaa
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330 gttacaagat tagcaggaga tgatagatat gaaacttctc taaaaatagc tgatgaagta
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332 ggtcttgata atgataaagc atttgtagtt ggaggaacag gattagcaga tgccatgagt
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334 atageteeag ttgeatetea attaagaaat getaatggta aaatggattt agetgatggt
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338 gatttcttag atgattcaca agttgatata ataggtggag aaaacagtgt atctaaagat
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                                                                         1860
342 agacaagcaa ctaatgcaaa agttataaaa gaatcttctt attatcaaga taacttaaat
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344 aatgataaaa aagtagttaa tttctttgta gctaaagatg gttctactaa agaagatcaa
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346 ttagttgatg ctttagcagc agctccagtt gcagcaaact ttggtgtaac tcttaattct
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348 gatggtaagc cagtagataa agatggtaaa gtattaactg gttctgataa tgataaaaat
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350 aaattagtat ctccagcacc tatagtatta gctactgatt ctttatcttc agatcaaagt
                                                                         2160
352 gtatctataa gtaaagttct tgataaagat aatggagaaa acttagttca agttggtaaa
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354 ggtatagcta cttcagttat aaacaaaatg aaagatttat tagatatgta a
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357 <210> SEQ ID NO: 7
358 <211> LENGTH: 2158
359 <212> TYPE: DNA
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Input Set : A:\P67635USO-sequence listing .ST25.txt

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360 <213> ORGANISM: Clostridium difficile
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365 cctgtttttg ctgcaactac tggaacacaa ggttatactg tagttaaaaa cgactggaaa
                                                                          120
367 aaagcagtaa aacaattaca agatggacta aaagataata gtataggaaa gataactgta
                                                                          180
369 tettttaatg atggggttgt gggtgaagta geteetaaaa gtgetaataa gaaageggae
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371 agagatgetg cagetgagaa gttatataat ettgttaaca etcaattaga taaattaggt
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373 gatggagatt atgttgattt ttctgtagat tataatttag aaaacaaaat aataactaat
                                                                          360
375 caagcagatg cagaagcaat tgttacaaag ttaaattcac ttaatgagaa aactcttatt
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377 gatatagcaa ctaaagatac ttttggaatg gttagtaaaa cacaagatag tggaggtaaa
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379 aatgttgctg caacaaaggc acttaaagtt aaagatgttg ctacatttgg tttgaagtct
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381 ggtggaagcg aagatactgg atatgttgtt gaaatgaaag caggagctgt agaggataag
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383 tatggtaaag ttggagatag tacggcaggt attgcaataa atcttcctag tactggactt
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387 ggtggttcaa cacctagtgc tgtagctgta agtggttttg taactaaaga tgatactgat
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389 ttagcaaaat caggtactat aaatgtaaga gttataaatg caaaagaaga atcaattgat
                                                                          840
391 atagatgcaa gctcatatac atcagctgaa aatttagcta aaagatatgt atttgatcca
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393 gatgaaattt ctgaagcata taaggcaata gtagcattac aaaatgatgg tatagagtct
                                                                          960
395 aatttagttc agttagttaa tggaaaatat caagtgattt tttatccaga aggtaaaaga
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397 ttagaaacta aatcagcaaa tgatacaata gctagtcaag atacaccagc taaagtagtt
                                                                         1080
399 ataaaagcta ataaattaaa agatttaaaa gattatgtag atgatttaaa aacatataat
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401 aatacttatt caaatgttgt aacagtagca ggagaagata gaatagaaac tgctatagaa
                                                                         1200
403 ttaagtagta aatattataa ttctgatgat aaaaatgcaa taactgataa agcagttaat
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405 gatatagtat tagttggatc tacatctata gttgatggtc ttgttgcatc accattagct
                                                                         1320
407 tcagaaaaaa cagctccatt attattagct tcaaaaagata aattagattc atcagtaaaa
                                                                         1380
409 tctgaaataa agagagttat gaacttaaag agtgacactg gtataaatac ttctaaaaaa
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411 gtttatttag ctggtggagt taattctata tctaaagatg tagaaaatga attgaaaaac
                                                                         1500
413 atgggtctta aagttactag attatcagga gaagacagat acgaaacttc tttagcaata
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415 getgatgaaa taggtettga taatgataaa geatttgtag ttggtggtae tggattagea
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417 gatgctatga gtatagctcc agttgcttct caacttaaag atggagatgc tactccaata
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419 gtagttgtag atggaaaagc aaaagaaata agtgatgatg ctaagagttt cttaggaact
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421 tctgatgttg atataatagg tggaaaaaat agcgtatcta aagagattga agagtcaata
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423 gatagtgcaa ctggaaaaac tccagataga ataagtggag atgatagaca agcaactaat
                                                                         1860
425 gctgaagttt taaaagaaga tgattatttc acagatggtg aagttgtgaa ttactttgtt
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427 gcaaaagatg gttctactaa agaagatcaa ttagtagatg ccttagcagc agcaccaata
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429 gcaggtagat ttaaggagtc tccagctcca atcatactag ctactgatac tttatcttct
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431 gaccaaaatg tagctgtaag taaagcagtt cctaaagatg gtggaactaa cttagttcaa
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433 qtaqqtaaaq qtataqcttc ttcaqttata aacaaaatqa aaqatttatt aqatatqq
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437 <211> LENGTH: 2217
438 <212> TYPE: DNA
439 <213> ORGANISM: Clostridium difficile
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                                                                          120
446 tatcaaaaag ttataactgg attacaagat ggtttaaaaa atggaaaaat aacaaatatt
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448 gatgtaatat ttgatggaag ttcaattggt gaggtagtgc caggttctga tgctgcagct
                                                                          240
450 gcagctacta aattaaaaag tttagttgat gataagttag ataacttagg tgatggaaaa
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VERIFICATION SUMMARY

DATE: 08/03/2005

PATENT APPLICATION: US/10/068,870A

TIME: 15:02:13

Input Set : A:\P67635USO-sequence listing .ST25.txt

Output Set: N:\CRF4\08032005\J068870A.raw

L:10 M:270 C: Current Application Number differs, Replaced Current Application Number